

REMARKS

This Amendment, submitted in response to the Office Action dated October 9, 2009, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1, 3-7, 9-16 and 20 are all the claims pending in the application. Applicants have amended claims 1, 7 and 13. See for example, Figs. 4 and 5 for support. Applicants submit that no new matter has been added.

I. Rejection of claims 1, 3-5, 7, 9-11, 13-16 and 20 under 35 U.S.C. § 103

Claims 1, 3-5, 7, 9-11, 13-16 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Aweva (US 6,894,974 B1) in view of Hann (US 7,088,722 B1) and further in view of Border et al. (US 2002/0071436 A1) and Guttman et al. (USP 7,031,259).

Claim 1

Claim 1 recites:

1. *(currently amended): A communication system, comprising:
a transmitter for transmitting one or more data packets;
at least one receiver connected to the transmitter, for receiving the data packets
and transmitting to the transmitter one or more response signals in response to the
received data packets; and
a multiplexer for multiplexing and transmitting to the transmitter the response
signals transmitted from the receiver, and transmitting the transmitted data packets from
the transmitter to a corresponding receiver, the multiplexer composed of:
a queue status monitor; and
a congestion control adjuster,
wherein the queue status monitor monitors a queue status of at least one
of the transmitted data packets and the response signals, and
wherein the congestion control adjuster instructs the receiver to compress
the response signals based on the monitored queue status, and
wherein the receiver includes a response signal holding/compressing unit for, if
the congestion control adjuster predicts that congestion will occur with the response
signals transmitted to the transmitter from the receiver, compressing the response*

signals for a predetermined period of time, as instructed by the congestion control adjuster, and
wherein the queue status monitor is disposed inside the multiplexer.

On page 12 of the Office Action, the Examiner states that Fig. 1 and col. 3, lines 49-56 of Guttmann disclose that “the receiver includes a response signal holding/compressing unit for, if instructed by the congestion control adjuster to compress the response signals, compressing the response signals for a second predetermined period of time,” as recited in claim 1 of the response filed July 27, 2009.

Guttmann, as mentioned by the Examiner, discloses determining to compress the packet in the scheduling scheme. However, Guttmann does not disclose “if the congestion control adjuster predicts that congestion will occur with the response signals transmitted to the transmitter from the receiver, compressing the response signals for a predetermined period of time, as instructed by the congestion control adjuster,” as recited in amended claim 1.

In more detail, claim 1 recites that the response signal holding/compressing unit compresses the response signals in response to the compression instruction from the congestion control adjuster, whereas Guttmann merely discloses compressing the packet. Accordingly, the present invention is distinct from Guttmann.

Additionally, the response signal holding/compressing unit is included in the receiver, and accordingly the response signals are compressed by the response signal holding/compressing unit in the receiver. However, in Guttmann, the packet is compressed in the transmitter. Therefore, the present invention is distinct from Guttmann.

Furthermore, the response signal holding/compressing unit compresses the response signals corresponding to the packets transmitted without being compressed, whereas in Guttman, the packet is compressed. Thus, the present invention further differs from Guttman.

Therefore, Guttman fails to teach or suggest “compressing the response signals for a predetermined period of time, as instructed by the congestion control adjuster, if the congestion control adjuster predicts that congestion will occur with the response signals transmitted to the transmitter from the receiver,” as recited in claim 1.

Further, Aweva, Hann and Border do not cure the deficiencies of Guttman.

On page 5 of the Office Action, the Examiner states that the congestion control adjuster recited in claim 1 of the present invention corresponds to the flow control unit 148 recited in col. 6, lines 54-56 and Fig. 2 of Hann. Additionally, on page 17 of the Office Action, the Examiner points out that “the Q monitor is not claimed as inside the MUX.” Claim 1 now recites “wherein the queue status monitor is disposed inside the multiplexer,” which Applicants submit is not taught in the cited art.

In Aweva, the ACK pacing control unit 38 comprises the Q monitor which is disposed therein and separated from the MUX 50 (see FIG. 2) Thus, it is possible to derive that the queue status monitor is disposed outside the MUX 50 of Aweva. Accordingly, it would not be obvious to one of skill in the art that the queue status monitor is disposed inside the MUX 50 of Aweva.

Furthermore, since it appears that the congestion control is performed based on the monitored queue status in Aweva, it is obvious that the queue status monitor is disposed outside the MUX 50. Accordingly, there is no teaching or suggestion that the congestion control adjuster is disposed inside the MUX 50 even when Aweva and Hann are combined.

Therefore, it would not be obvious to one of skill in the art that the combination of Aweva and Hann teaches that “**the queue status monitor is disposed inside the multiplexer.**” as recited in claim 1.

Consequently, claim 1 and its dependent claims should be deemed allowable.

To the extent independent claims 7 and 13 recite similar subject matter, claims 7 and 13 and their dependent claims should be deemed allowable for at least the same reasons.

Claim 7

Claim 7 recites, *inter alia*, that “**the queue status monitor is disposed inside the gateway.**” Applicant submits that the art cited by the Examiner does not teach this aspect of the claim. Thus, claim 7 and its dependent claims should be deemed allowable.

II. Rejection of claims 6 and 12 under 35 U.S.C. § 103

Claims 6 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Aweva et al. (US 6,894,974 B1) in view of Hann (US 7,088,722 B1), Border et al. (US 2002/0071436 A1) and Guttman et al. (USP 7,031,259) as applied to claims 1, 7, and 13 above, and further in view of Norrell et al. (USP 6,853,637 B1).

Claims 6 and 12 should be deemed allowable by virtue of their dependency to amended claims 1 and 7 for at least the reasons set forth above. Moreover, Norrell does not cure the deficiencies of Aweva and Hann and Border and Guttman.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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